ELSEVIER SCIENTIFIC
PUBLISHERS IRELAND

Plant Science 96 (1994) 243–244

PLANT SCIENCE

Contents

Volume 96 (1994)

PHYSIOLOGY AND BIOCHEMISTRY

Effects of Zn on flax seedlings: differences in the response of the cationic and anionic isozymes of peroxidase
M.A. Fieldes, K.E. Gerhardt (Ontario, Canada) 1–13

Properties of sucrose-phosphate phosphatase from rice (*Oryza sativa*) leaves
E. Echeverría, G. Salerno (Mar del Plata, Argentina) 15–19

Effect of water stress on growth, osmotic potential and solute accumulation in cell cultures from chili pepper (a mesophyte) and creosote bush (a xerophyte)
M.S. Santos-Díaz, N. Ochoa-Alejo (Irapuato, México) 21–29

Induction of enzyme activities and antioxidant production in barley plants as a result of SO_2 fumigation
F. Navari-Izzo, R. Izzo (Pisa and Catania, Italy) 31–40

Lipid peroxidation and antioxidative enzymes in senescing tobacco leaves during post-flooding
W.P. Hurng, C.H. Kao (Taiwan, Republic of China) 41–44

Properties and subcellular localization of a plastidial *sn*-glycerol-3-phosphate acyltransferase of *Pisum sativum* L. expressed in *Escherichia coli*
M. Frentzen, G. Peterek, F.P. Wolter (Hamburg, Germany) 45–53

Proton transport by a fraction of endoplasmic reticulum and Golgi membranes of corn roots: comparison with the plasma membrane and tonoplast H^+ pumps
J.A.F. Vicente, M. Graça P. Vale (Coimbra, Portugal) 55–68

Phosphorylation of a plant protease inhibitor protein by wheat calcium-dependent protein kinase
G.M. Neumann, R. Condron, G.M. Polya (Victoria, Australia) 69–79

Involvement of a GTP-binding protein in signal transduction in potato tubers treated with the fungal elicitor from *Phytophthora infestans*
K. Kawakita, N. Doke (Nagoya, Japan) 81–86

GENETICS AND MOLECULAR BIOLOGY

Root-specific expression of a glycine-rich protein gene in *Brassica napus*
D. Bergeron, R. Boivin, C.L. Baszczynski, G. Bellemare (Québec and Ontario, Canada) 87–98

Characterization of 45S ribonucleoprotein particles detected in wheat embryo cytoplasm
B.K. Iskakov, K.I. Madin (Alma-Ata, Kazakhstan) 99–108

Germination-associated lipoxygenase transcripts persist in maturing soybean plants and are induced by jasmonate
T.K. Park, M.A. Holland, J.G. Laskey, J.C. Polacco (Columbia, MO) 109–117

Agrobacterium-mediated transformation of *Stylosanthes guianensis* and production of transgenic plants
R. Sarria, A. Calderón, A.M. Thro, E. Torres, J.E. Mayer, W.M. Roca (Cali, Colombia) 119–127

Gene and cDNA for plant cytochrome P450 proteins (CYP72 family) from *Catharanthus roseus*, and transgenic expression of the gene and a cDNA in tobacco and *Arabidopsis thaliana*
U. Mangold, J. Eichel, A. Batschauer, T. Lanz, T. Kaiser, G. Spangenberg, D. Werck-Reichhart, J. Schröder (Freiburg, Germany; Zürich, Switzerland; Strasbourg, France) 129–136

CELL TISSUE STUDIES IN VITRO

Plant regeneration from the callus derived from root explants of *Cucumis melo* L. cv. Pusa sharbati
R. Kathal, S.P. Bhatnagar, S.S. Bhojwani (Delhi, India) 137–142

Ultrastructural and biochemical study of *Berberis parvifolia* root meristem and cell cultures
C. Deliu, C. Craciun, V. Craciun, M. Tamas (Cluj-Napoca, Romania) 143–150

Low levels of expression of wild type *Bacillus thuringiensis* var. *kurstaki cry*IA (c) sequences in transgenic walnut somatic embryos
A.M. Dandekar, G.H. McGranahan, P.V. Vail, S.L. Uratsu, C. Leslie, J.S. Tebbets (Davis and Fresno, CA) 151–162

Rooting in two almond genotypes
E. Caboni, C. Damiano (Rome, Italy) 163–165

Metabolism of reserve products during development of somatic embryos and germination of zygotic embryos in grapevine
O. Faure, J. Aarrouf (St-Etienne and Paris, France) 167–178

Optimization of conditions for DNA uptake and transient GUS expression in protoplasts for different tissues of wheat and barley
I. Díaz (Madrid, Spain) 179–187

Early detection of embryogenic competence and of polarity in *Camellia japonica* L. by electron probe X-ray microanalysis
M.C. Pedroso, M. Salomé Pais (Lisboa, Portugal) 189–201

GENERAL

In vivo and in situ measurements of spectroscopic and photosynthetic properties of undetached maize leaves using the open photoacoustic cell technique
A.C. Pereira, L.M. Prioli, W.J. da Silva, G. de O. Neto, H. Vargas, N. Cella, J.J. Alvarado-Gil (Campinas and Nova Friburgo, Brazil; México, México) 203–209

Effect of 5-azacytidine on growth pattern in *Chenopodium rubrum*
J.T.P. Albrechtová, J. Ullmann, J. Krekule, F. Seidlová (Vokovice, Czech Republic) 211–215

Partial purification and modulation of tetrahydroberberine oxidase from *Coscinium fenestratum*
A.J. Nair, J.M. Rao, P.R. Sudhakaran (Trivandrum, India) 217–221

Routine transformation of rapid cycling cabbage (*Brassica oleracea*) — molecular evidence for regeneration of chimeras
P. Berthomieu, C. Béclin, F. Charlot, C. Doré, L. Jouanin (Versailles, France) 223–235

Subject index Volume 96 (1994) 237–239
Author index Volume 96 (1994) 241
Contents Volume 96 (1994) 243–244